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A47D 5/00 , G07F 17/18

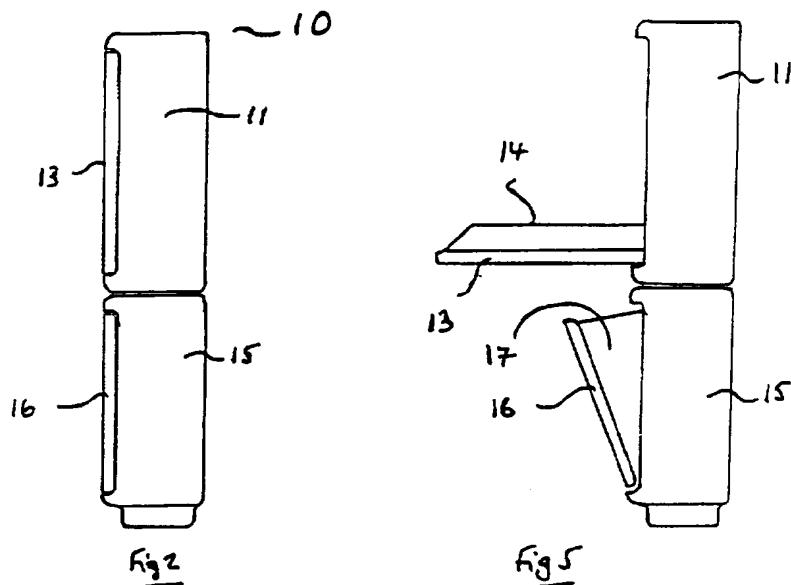
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U1S S1120 S1122

(56) Documents Cited  
US 5161270 A US 4876970 A US 4573608 A  
US 3999490 A

(58) Field of Search  
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## (54) Baby changing apparatus

(57) Dispensing apparatus 10 comprises a housing 11 inside which is mounted a vending apparatus arranged to vend disposable nappies. The front of the housing 11 comprises a pivotally movable door 13 which may be lowered to a horizontal position to support a baby when it is desired to change a nappy. The door 13 is provided with a shaped interior surface 14. Used nappies are placed in disposal bin 15.



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At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995

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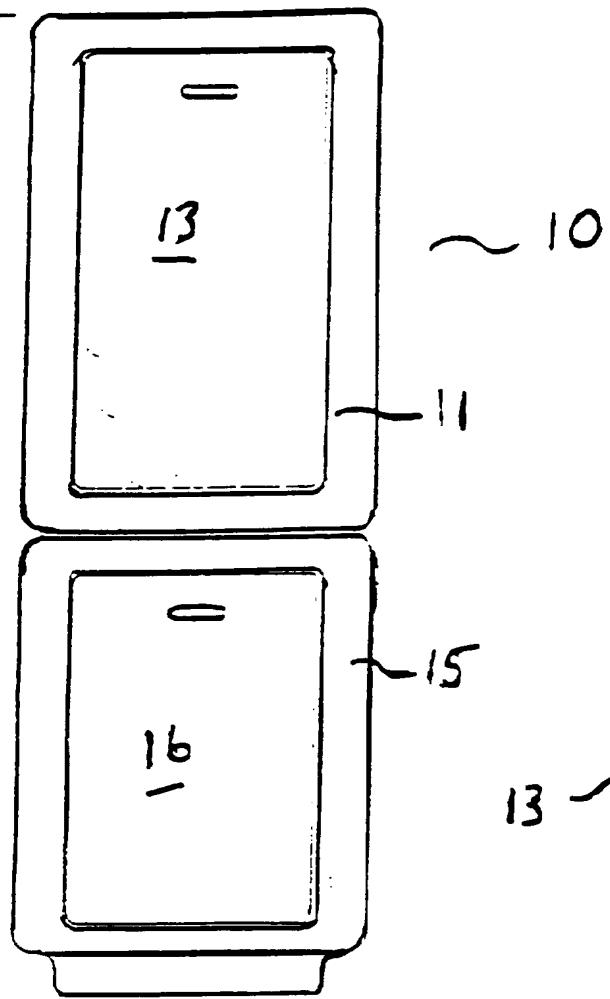


Fig 1

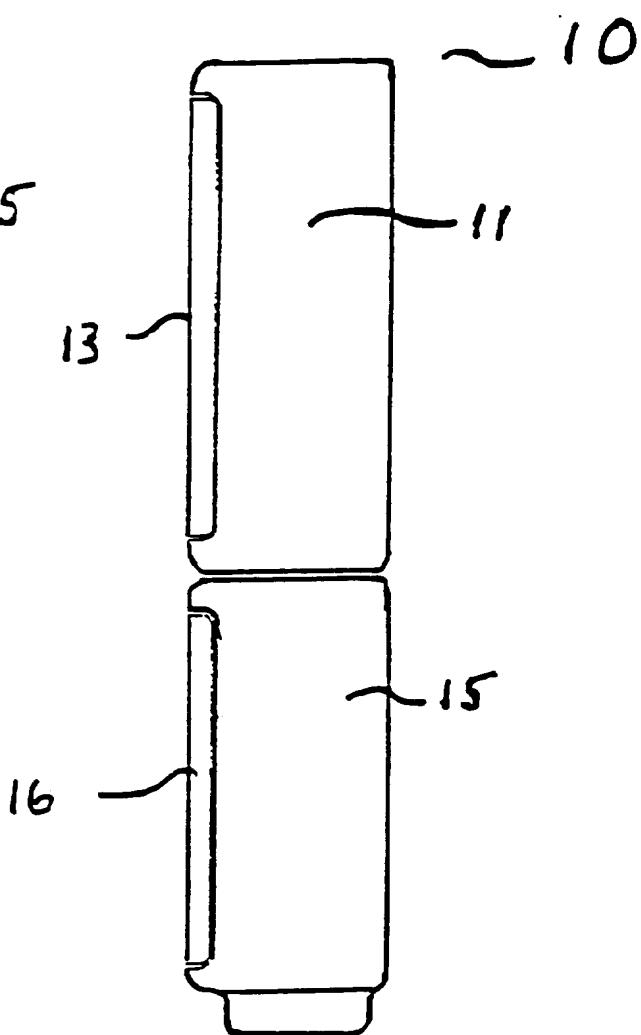


Fig 2

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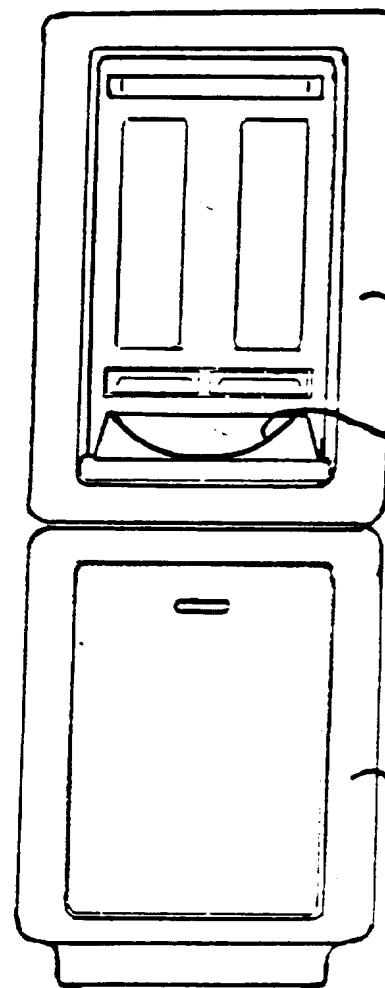


Fig 3

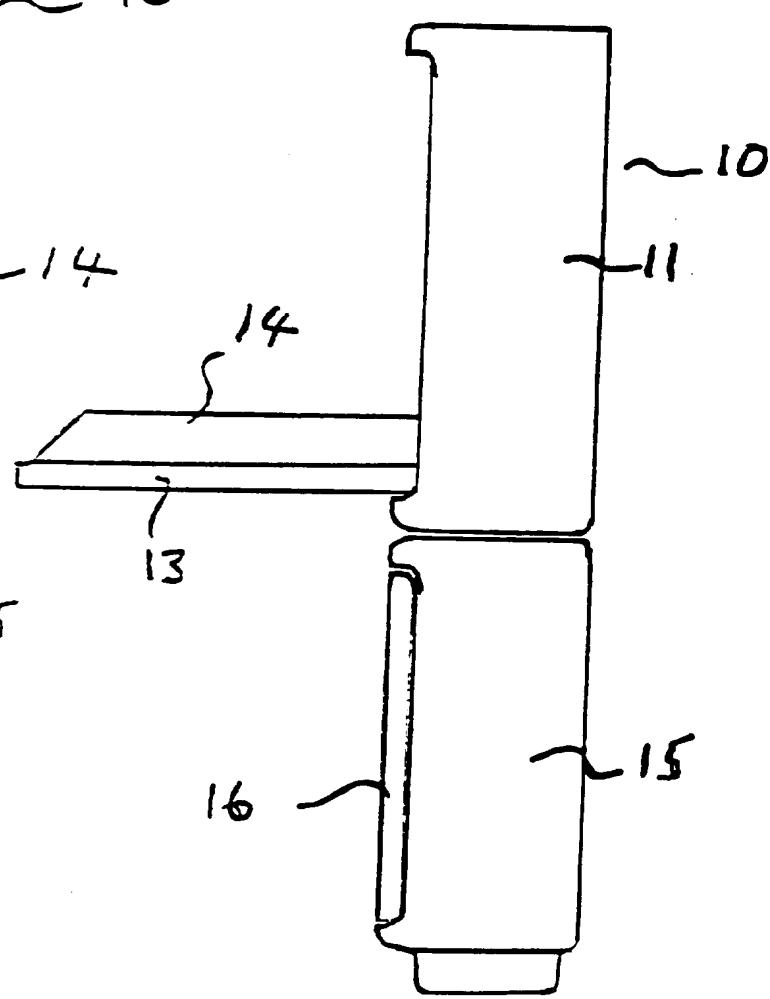


Fig 4

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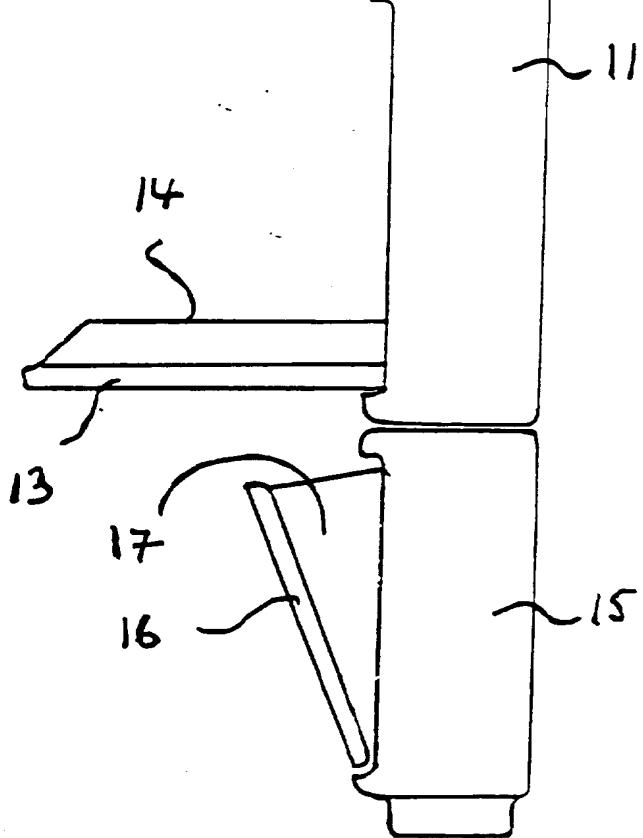


fig 5

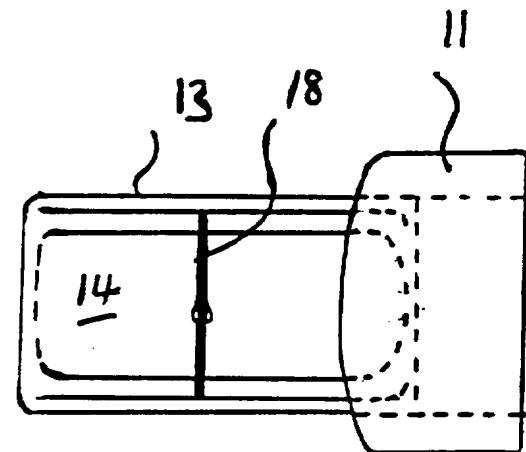


fig 6.

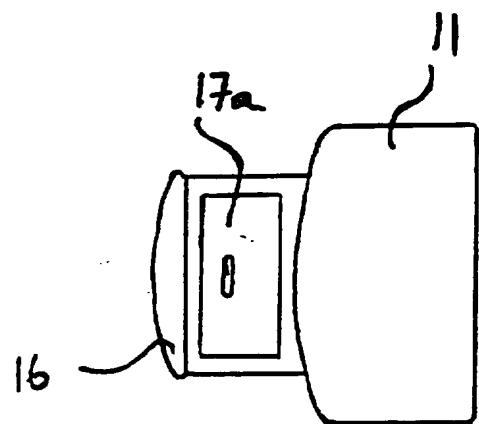


fig 7

- 1 -

**BABY SERVICE APPARATUS AND METHOD**

The present invention relates to a baby service apparatus and method.

5

Disposable nappies for babies have become more widely used in recent years. Because the need to change a baby's nappy may arise at any time, provision is often made in hotels, restaurants and public toilets for babies nappies 10 to be changed. Such provision commonly comprises a table and a waste-bin in which to put the used nappy. In addition, a vending machine may be provided to dispense fresh disposable nappies. However, such apparatus is bulky and because of this, many toilets are unable to 15 provide it because of already limited space.

According to one aspect of the present invention, there is provided dispensing apparatus arranged, in use, to dispense articles, the dispensing apparatus comprising 20 support means arranged in use to support a person.

Preferably, the apparatus comprises a housing, wherein at least first portion of the housing comprises support means, arranged in use to support a person.

25

Preferably, the support means is arranged in use to support an infant.

30

The support means may be shaped so as to receive a substantially prostrate infant in use.

Preferably, the first portion of the housing is moveable between a first position in which it forms substantially a wall of the housing, and a second position

in which it projects substantially horizontally from the housing.

5       The first portion may comprise a front wall of the housing in the first position.

The apparatus may comprise a vending machine.

10      Preferably, the vending machine is located within the housing.

The apparatus may be provided with a container for receiving used articles.

15      Preferably, the container is located within a container housing.

20      Preferably, the container housing comprises a door portion which is moveable in use between a first position in which the door portion is substantially closed and a second position in which access is provided to the interior of the container.

25      The dispensing apparatus may be located substantially above or on top of the container housing.

The door portion of the container housing may be pivotally mounted on a lower region of the container housing.

30

The apparatus may be arranged, in use, to dispense nappies for babies.

35      The invention also includes a method of changing a baby's nappy, the method comprising supporting the baby on

a support portion of dispensing apparatus, and obtaining a nappy from the dispensing apparatus.

5       The method may include disposing of a used nappy in a container located substantially below or adjacent the dispensing apparatus.

10      Preferably, the method includes changing a nappy of a baby using dispensing apparatus according to any statement herein.

The invention may also include any combination of the features or limitations referred to herein.

15      The invention may be carried into practice in various ways, but an embodiment will now be described by way of example only, with reference to the accompanying diagrammatic drawings, in which:

20      Figure 1 is a front view of a dispensing apparatus according to an embodiment of the present invention,

Figure 2 is a side view of the apparatus of Figure 1,

25      Figure 3 is a front view of the apparatus of Figures 1 and 2, in an alternative configuration,

Figure 4 is a side view of the apparatus of Figures 1 to 3 in an alternative configuration,

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Figure 5 is a side view of the apparatus of Figures 1 to 4 in a further alternative configuration,

35

Figure 6 is a plan view of the apparatus of Figure 5,

and

Figure 7 is a plan view of the apparatus of Figures 1 to 6 in an alternative configuration.

Referring to Figures 1 to 4, there is shown generally at 10 a dispensing apparatus comprising a housing 11 inside which is mounted a vending apparatus 12 (Figure 3) arranged in use to vend disposable nappies (not shown). The front of the housing 11 comprises a pivotally moveable door 13 which remains in the position shown in Figures 1 and 2 when the apparatus 10 is not in use, and acts as a closure to the apparatus, and which may be lowered to a horizontal position shown in Figures 3 and 4 to support an infant (not shown) when it is desired to change a nappy of the infant.

15

The door 13 is provided with a shaped interior surface 14 to provide a comfortable support for the infant when the door 13 is in the lowered configuration.

20

The apparatus shown in Figures 1 to 7 is optionally mounted on a container housing 15 which is generally of the same shape as, although slightly taller than, the housing 11. The container housing 15 is provided with a door 16 at the front thereof, which door 16 is capable of limited pivotal movement outwards from a closed position, shown in Figures 1 to 4, to an open position, shown in Figures 5 and 7. Within the container housing 15 is a disposal unit 17 having a lid 17a which is spring-biased to a closed position. The disposal unit 17 is arranged to receive used disposable nappies (not shown), thereby permitting a user to dispose of the nappies conveniently and hygienically.

Optionally, a securing belt 18, shown in Figure 6, may be provided to assist in the secure support of the infant on the support surface 14 of the apparatus.

5       The housing 11 and 15 may conveniently be manufactured from polythene material using a known rotational moulding technique. The housing 11 and housing 15 are therefore relatively lightweight and yet strong, whilst having an aesthetically appealing and readily 10 cleanable finish. The optional mounting of the housing 11 on top of the housing 15 enables the user easily to reach the disposal unit 17 without leaving the infant. In addition, in this arrangement, the support surface 14 is located at a convenient height for nappy changing.

15

The apparatus described above provides all of the facilities needed to change an infant's nappy, whilst being efficient in the use of space, particularly when closed, which is useful in small toilets or washrooms.

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It will be apparent to those skilled in the art that various modifications may be made to the invention without departing from its scope.

CLAIMS

1. A dispensing apparatus arranged in use to dispense articles, the dispensing apparatus comprising support means arranged in use to support a person.  
5
2. A dispensing apparatus according to claim 1 wherein the apparatus comprises a housing wherein at least a first portion of the housing comprises support means arranged in use to support a person.  
10
3. A dispensing apparatus according to claim 1 or claim 2 wherein the support means is arranged in use to support an infant.  
15
4. A dispensing apparatus according to any of claims 1 to 3 wherein the support means is shaped so as to receive a substantially prostrate infant in use.
- 20 5. A dispensing apparatus according to claim 2 wherein the first portion of the housing is movable between a first position in which it forms substantially a wall of the housing and a second position in which it projects substantially horizontally from the housing.  
25
6. A dispensing apparatus according to claim 5 wherein the first portion comprises a front wall of the housing in the first position.
- 30 7. A dispensing apparatus according to any of claims 1 to 6 wherein the apparatus comprises a vending machine.
8. A dispensing apparatus according to claim 2 and claim 7 wherein the vending machine is located within the  
35 housing.

9. A dispensing apparatus according to any of claims 1 to 8 wherein the apparatus is provided with a container for receiving used articles.

5 10. A dispensing apparatus according to claim 9 wherein the container is located within a container housing.

10 11. A dispensing apparatus according to claim 10 wherein the container housing comprises a door portion which is moveable in use between a first position in which the door portion is substantially closed and a second position in which access is provided to the interior of the container.

15 12. A dispensing apparatus according to claim 10 or claim 11 wherein the dispensing apparatus is located substantially above or on top of the container housing.

20 13. A dispensing apparatus according to claim 11 wherein the door portion of the container housing is pivotally mounted on a lower region of the container housing.

14. A dispensing apparatus according to any of claims 1 to 13 wherein the apparatus is arranged in use to dispense nappies for babies.

25 15. A method of changing a baby's nappy the method comprising supporting the baby on a support portion of dispensing apparatus and obtaining a nappy from the dispensing apparatus.

30 16. A method according to claim 15 wherein the method includes disposing of a used nappy in a container located substantially below or adjacent the dispensing apparatus.

17. A dispensing apparatus substantially as herein described with reference to the accompanying drawings.

5      18. A method of changing a baby's nappy the method being substantially as herein described with reference to the accompanying drawings.

10     19. A method of changing a baby's nappy according to any of claims 15, 16, or 18, the method comprising using apparatus according to any of claims 1 to 14 or claim 17.

**Patents Act 1977****Examiner's report to the Comptroller under Section 17  
(The Search report)**

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**Relevant Technical Fields**

(i) UK Cl (Ed.N) B8U (UAH, UB); A4L (LAAA/B/K/T, LBPB)  
 (ii) Int Cl (Ed.6) A47D 5/00, 13/00; G07F 17/00,/18

**Search Examiner**  
R D CAVILL

**Date of completion of Search**  
13 OCTOBER 1995

**Databases** (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii) ONLINE: WPI

**Documents considered relevant following a search in respect of Claims :-**  
**1 TO 19**

**Categories of documents**

X:	Document indicating lack of novelty or of inventive step.	P:	Document published on or after the declared priority date but before the filing date of the present application.
Y:	Document indicating lack of inventive step if combined with one or more other documents of the same category.	E:	Patent document published on or after, but with priority date earlier than, the filing date of the present application.
A:	Document indicating technological background and/or state of the art.	&:	Member of the same patent family; corresponding document.

Category	Identity of document and relevant passages		Relevant to claim(s)
X	US 5161270	(NAJMABADI) see Figures note dispensing apparatus under table 30 in Figure 2	1-4, 9, 14, 15, 16, 19
X	US 4876970	(BOLDUC) see whole document	1-8, 14, 15, 19
X	US 4573608	(HANSEN) see whole document	1-8, 14, 15, 19
X	US 3999490	(ROCKER) see Figures, note dispensing apparatus under table 76 in Figures 1 and 2	1-4, 9, 14, 15, 16, 19

**Databases:** The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).